

LEVEL OF STUDENT SATISFACTION WITH FACILITIES EDUCATION WITH TUITION AS A MODERATION VARIABLE

Nur Qoudri Wijaya, Moh. Baqir Ainun*, Dedy Arfiyanto

Faculty of Economics and Business, Universitas Wiraraja, Madura, Sumene
nurqoudriwijaya@wiraraja.ac.id, baqirainun@wiraraja.ac.id, dedyarfiyanto@wiraraja.ac.id

ABSTRACT

The sustainability of a company, both manufacturing, trading, and service companies, will not be separated from the role and existence of consumers they have. The purpose of this study is to determine the effect of educational facilities on student satisfaction with education costs as a moderation variable. This study used a questionnaire that was distributed to all students at Wiraraja Madura University. Data analysis was performed using SmartPLS Structural Equation Modelling (SEM) at a significant rate of 5%. The results showed that educational facilities and education costs had a significant effect on student satisfaction at Wiraraja University. However, tuition fees were not shown to be a moderating variable on the relationship between educational facilities and student satisfaction. Based on the results of descriptive statistical analysis, it can also be seen that the level of student satisfaction at Wiraraja University is between the categories of quite satisfactory to satisfactory. This shows that in general, Wiraraja University has been able to provide good educational facilities. However, it is known that the indicator of educational facilities that has the lowest statistical t value is the hotspot area. Therefore, Wiraraja University should pay more attention to the quality of hotspot areas to increase student satisfaction. This research focuses on Wiraraja Madura University, this is intended so that the research results can be used for management decision-making at Wiraraja University.

Keywords: *Consumer satisfaction, educational facilities, tuition fees, college*

This article is licensed under [CC BY-SA 4.0](https://creativecommons.org/licenses/by-sa/4.0/) 

INTRODUCTION

The sustainability of a company, both manufacturing, trading, and service companies, will not be separated from the role and existence of consumers they have. The company must be able to meet the needs of consumers to make a profit. Everything related to consumers must be considered by the company including the satisfaction of the customer itself (Rahmawati, 2013).

In service companies, to maintain customer satisfaction, one way that needs to be reworked is improvement and quality improvement both in terms of service and completeness of facilities that must be adjusted to consumer needs (Musanto, 2004). Consumer satisfaction is determined by consumer perception of the performance of products or services in meeting customer expectations (Hanifa et al., 2018).

Higher education as an educational service provider institution is required to be able to provide services that are able to create maximum satisfaction for the community of service users, which in turn will actually be able to encourage the progress of the University (Syakur, 2018). One way that can be taken is to improve the facilities and infrastructure or educational facilities provided for students (Kaur & Bhalla, 2018; Palominos-Belmar et al., 2016). Increasing educational facilities will have an impact on increasing student satisfaction (Kurbani, 2017). Educational facilities provided by universities have a direct, significant, and positive influence on student satisfaction (Bachtiar, 2011; Sukandi, 2010).

Indonesia has many universities both public and private such as colleges, polytechnics, institutes, and universities that compete with each other to get new students to apply. The

increasingly fierce competition between universities forces them to strive to improve the quality of services provided to students (Kardoyo et al., 2020). Every university is currently competing with each other to offer increasingly competitive educational products (Kurbani, 2017). The intense competition requires universities to always build a good reputation through new breakthroughs that can be a mainstay and have high selling points (Harahap et al., 2018). This competitive condition will be more felt by private universities. Private universities are currently faced with a situation where they must remain competitive with state universities and other private universities (Kurbani, 2017).

Students are customers or consumers who experience educational services directly at universities. This is because students are directly involved in the process carried out by an educational institution. Each student has different expectations regarding the needs and desires needed as well as educational administration services received from the University (Hanifa et al., 2018). Therefore, the concept of student satisfaction can be equated with consumer satisfaction, namely the level of a person's feelings after comparing the performance or results he feels compared to his expectations (Rahmawati, 2013).

Student satisfaction is a very important aspect and needs special attention because student satisfaction is a determinant of the existence and success of higher education (Shaylide, 2014). Student satisfaction has become an important part of marketing strategy and has greater power than an advertisement (Ibrahim, 2021). Student satisfaction data provides signals that there will be problems. This can be seen in the decline in *income* from universities (Ibrahim, 2021; Kurbani, 2017). Satisfying students with good service quality is the key to competing in a higher education institution environment (Khamid, 2010), and winning competition with other universities (Syakur, 2018).

In addition to educational facilities in the form of facilities and infrastructure, attention to competitive education costs emphasizes student satisfaction in order to attract prospective students, and serve and retain them (Wijaya et al., 2016). In the end, the factor of education costs that must be incurred by students also needs to be considered because the cost of education can also affect student satisfaction (Kinung & Rudini, 2020).

Students will provide a perception of the suitability of the costs incurred with the facilities and infrastructure provided by universities as a form of service (Shaylide, 2014), where the suitability of education costs with the facilities offered is one of the factors that affect student satisfaction itself (Muklis, 2021; Rahmawati, 2013). The optimal level of satisfaction seen from the relationship between value (facilities, products, quality) with price (costs offered) becomes an important component if the institution is committed to meeting the needs of customers (students) (Rahmawati, 2013).

The above presentation shows the relationship between educational facilities (facilities and infrastructure), tuition costs, and student satisfaction. Students will perceive their satisfaction with educational facilities with the cost of education they spend as one of the considerations. Are they satisfied with the educational facilities that have been received with the number of rupiah of education costs they spend? From this, it can be seen that the variable cost of education is not purely an independent variable that has a direct influence on student satisfaction like previous studies. However, the variable cost of education refers more to variables that will determine how strong the influence of educational facilities provided by universities is on student satisfaction. Therefore, this study emphasizes more on how the

influence of educational facilities on student satisfaction with education costs as a moderation variable.

Wiraraja University is one of the private universities in East Java. Wiraraja University is the best private university in Madura based on the assessment of the East Java region in accordance with Decree Number: 063 / K / KL / 2016. The main consumers, who in this case are students, from Wiraraja University are the community around Sumenep regency. Such conditions will cause the University's dependence on local consumers in Sumenep Regency, so the establishment of a new university in Sumenep will have an impact on the admission of new students at Wiraraja University. Therefore, satisfaction from students must be considered as an effort to create a good name among students and ultimately be able to attract prospective new students.

This research needs to be done to determine the effect of educational facilities on student satisfaction with education costs as a moderator variable. In addition, the results of this study will answer two important questions about the sustainability of Wiraraja University. First, the results of this study will show how satisfied students are with the educational facilities provided by the University, which in turn will affect student testimonials to prospective new students of Wiraraja University. Second, this study will show whether the level of student satisfaction obtained is in accordance with the tuition fees billed and ultimately will provide input to the University to improve educational facilities or survive with existing educational facilities.

Consumer satisfaction is a person's feeling of pleasure or disappointment that arises after comparing the performance (results) of the product thought against the expected performance (Kotler & Keller, 2007). Consumer satisfaction is a situation shown by consumers when they realize that their needs and desires are as expected and fulfilled properly (Tjiptono, 2012). Consumer satisfaction is also an individual's perception of the performance of a product or service associated with consumer expectations (Schiffman & Kanuk, 2010). Kotler & Keller (2007), stated that there are three aspects of consumer satisfaction, namely: Loyalty to the product, positive word-of-mouth communication, and company are the main considerations.

Educational Facilities are all facilities needed in the learning process, which can include movable and immovable goods so that educational goals are achieved (Frisdiantara & Graha, 2013). Educational facilities are facilities and infrastructure used to help facilitate all forms of human activities in the field of education so as to provide wider opportunities to develop their potential. Schools with good infrastructure and complete facilities can improve the quality of teaching and learning (Haron et al., 2020). In the end, supporting learning infrastructure is a factor that satisfies students (Kardoyo et al., 2020; Kaur & Bhalla, 2018).

H1. Educational facilities affect student satisfaction

Bastian (2015), this sense has a broad scope, namely all types of expenses related to the provision of education, both in the form of money and goods and energy. Tuition fees include tuition fees, tuition fees, and boarding house fees (Kinung & Rudini, 2020; Shaylide, 2014). Students will perceive their satisfaction with educational facilities with the cost of education they spend as one of the considerations. Are they satisfied with the educational facilities that have been received with the number of rupiah of education costs they spend?

H2. Tuition fees moderate the effect of educational facilities on student satisfaction.

METHOD

Data collection in the study used an electronic questionnaire distributed to Wiraraja University Students. There were 242 respondents who filled out the questionnaire. The data analysis technique in this study uses the help of *Structural Equation Modelling* (SEM) SmartPLS.

RESULTS AND DISCUSSION

This study uses the help of SEM SmartPLS to determine the effect of Educational Facilities on Student Satisfaction with Tuition Fees as a moderation variable at Wiraraja University.

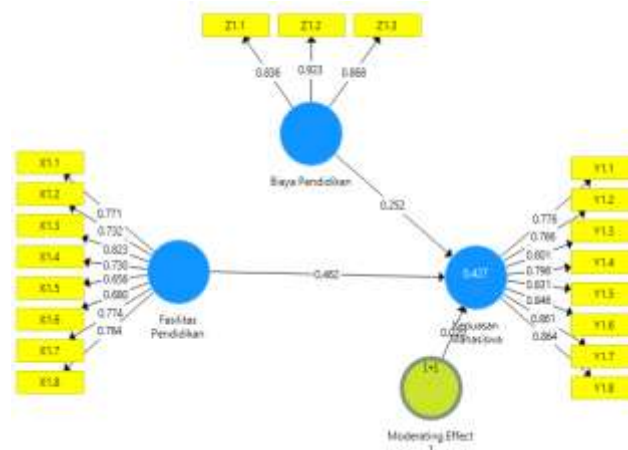


Figure 1. Factor loading model fit analysis

Figure 1 shows the output results of the validity convergent test where all indicators have a *loading factor* value above 0.5. In addition, the results of the *Average Variance Extracted* (AVE) test obtained a value of all constructs >0.5 indicating the indicator is able to explain the factor and reliability tests of all constructs obtained a composite reliability value of >0.6 which means that the constructs described are reliable (Table 5).

Table 5. Average Variance Extracted (AVE) and Composite Reliability

	Composite Reliability	Average Variance Extracted (AVE)
Tuition Fees	0.908	0.767
Educational Facilities	0.907	0.552
Student Satisfaction	0.942	0.670
Moderating Effect 1	1.000	1.000

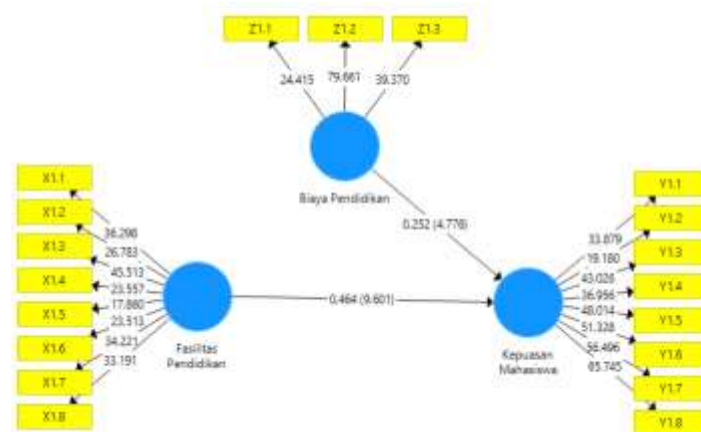


Figure 2. *T value* model fit analysis

Figure 2 shows that Educational Facilities on student satisfaction have a *T value* of 9.601 (>1.96) so educational facilities affect student satisfaction. In addition, the cost of education to student satisfaction has a *T value* of 4.776 (>1.96) which can be interpreted that the cost of education affecting student satisfaction. There is one path that is not significant, namely *the moderating effect* on student satisfaction because it has a *T value* of <1.96 so it is omitted from the pathway. The loss of *the moderating effect* pathway shows that the cost of education does not moderate the effect of educational facilities on student satisfaction. The model before the *moderating effect* path is removed is presented in Figure 3.

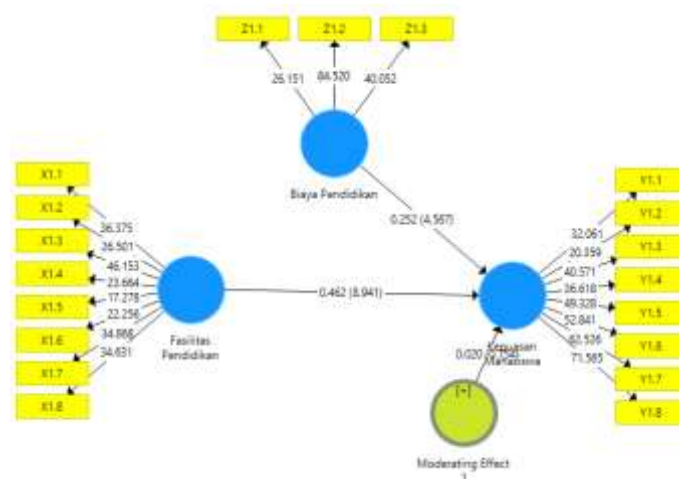


Figure 3. *T value* analysis before model fit

Figure 4 is a path drawing with thick lines to find out the indicators that play the most role in explaining the construct in this study. Figure 4 shows that the indicator that has the largest value in the construct of educational facilities is indicator X1.3, which is a computer laboratory with a T Statistics value of 45.513, while the indicator that has the lowest T Statistics value in the construct of educational facilities is indicator X1.5, namely hotspot area.

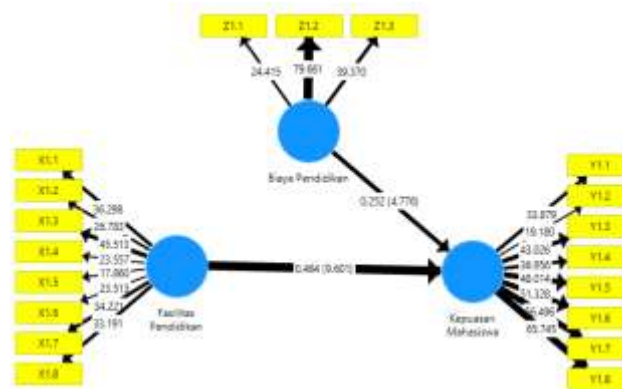


Figure 4. T value analysis of fit model with thick lines

As for the construct of education costs, the indicator that has the largest T Statistics value is the Z1.2 indicator, namely the cost of lecture equipment and equipment at Wiraraja University, while the indicator that has the lowest T Statistics value is the Z1.1 indicator, namely Wiraraja University tuition fees or tuition fees. As for the student satisfaction construct, the indicator that has the largest T Statistics value is the Y1.8 indicator, which is the quality of graduates from Wiraraja University, while the indicator that has the lowest T Statistics value is the Y1.2 indicator, which is the pleasure to study without coercion from any party.

Based on the results of the research that has been described, it can be seen that educational facilities have a significant effect on student satisfaction. The educational facilities provided by the campus are certainly the main highlight of students because they are directly related to student lecture activities. Adequate facilities will make the lecture process better and in the end, the final results of the lecture will be as expected.

Educational facilities provided by the campus will have an impact on student satisfaction (Bachtiar, 2011; Kurbani, 2017; Sukandi, 2010) whereas the ability of the campus to increase student satisfaction will ultimately have an impact on the progress of the campus (Kaur & Bhalla, 2018; Palominos-Belmar et al., 2016; Syakur, 2018). Therefore, Wiraraja University must maintain student satisfaction by maintaining the comfort and completeness of its educational facilities.

Based on the results of Table 2, we can know that educational facilities that have received a lot of positive perceptions from students are the completeness of language laboratories and computer laboratories. Therefore, Wiraraja University should maintain educational facilities in the form of language laboratories and computer laboratories. However, for educational facilities in the form of hotspot areas availability should be increased. This is because the results of the research show that student responses to educational facilities in the form of hotspot areas have the lowest results to other educational facilities. In fact, according to Qirom & Sungkar (2019), educational facilities in the form of hotspot areas are important because the academic community at the university can obtain information easily and quickly which in turn can improve the quality of the academic community itself.

The results of the research described above also show that student perceptions of education costs affect student satisfaction. However, the moderating effect of tuition fees has not been shown to have an effect on student satisfaction. The cost of education is inseparable from

student satisfaction. This is because competitive education costs emphasize student satisfaction (Kinung & Rudini, 2020; Wijaya et al., 2016).

Students will provide a perception of the suitability of the costs incurred with the facilities and infrastructure provided by universities as a form of service (Shaylide, 2014), where the suitability of education costs with the facilities offered is one of the factors that affect student satisfaction itself (Muklis, 2021; Rahmawati, 2013). The optimal level of satisfaction seen from the relationship between value (facilities, products, quality) and price (costs offered) becomes an important component if the institution is committed to meeting the needs of customers (students) (Rahmawati, 2013).

Based on Figure 3 on the results of the study, it can be seen that the best response is in the cost of college equipment and equipment, while the less good response is in the cost of student tuition fees. SPP is an education fee that must be paid by students for each semester. Similar to basic economic concepts, it is common for students to want tuition fees to be paid as cheaply as possible with the best possible quality (benefits). However, Wiraraja University should study how to make the tuition fees charged to students less burdensome. One way that can be applied is with the installment system, deferral, and relief.

CONCLUSION

Educational facilities and tuition fees have a significant effect on student satisfaction at Wiraraja University. Tuition fees were not shown to be a moderating variable on the relationship between educational facilities and student satisfaction. The better the students' perception of educational facilities, the better the level of student satisfaction, as well as the better the perception of students on the cost of education, the better the level of student satisfaction.

Wiraraja University should maintain or improve existing educational facilities on campus in accordance with research results. Wiraraja University should optimize the tuition payment system so that students' perceptions of the cost of education at Wiraraja University are better.

This study only focuses on the variables of educational facilities and education costs, but does not include services from education staff and lecturers. Future research should add to these variables. In addition, this research only focuses on Wiraraja University so that the resulting implications can be specifically used for the benefit of the institution.

ACKNOWLEDGMENT

Acknowledgments are conveyed to the Institute for Research and Community Service of Wiraraja University for funding this research in accordance with the Research Contract Number: 034/SP2H/PEN-DI/LPPM/UN-IJA/VII/2022.

REFERENCES

- Bachtar, D. I. (2011). Analisis faktor yang mempengaruhi kepuasan mahasiswa dalam memilih politeknik sawunggalih aji purworejo. *Jurnal Dinamika Sosial Ekonomi*, 7(1).
- Bastian, I. (2015). *Akuntansi untuk Kecamatan dan Desa*. Erlangga.
- Frisdiantara, C., & Graha, A. N. (2013). Pengaruh Dimensi Pelayanan dan Dimensi Fasilitas Terhadap Kepuasan Mahasiswa Pada Universitas Kanjuruhan Malang. *Jurnal Ekonomi Modernisasi*, 9(2), 1–14. <https://doi.org/https://doi.org/10.21067/jem.v9i2.201>

- Hanifa, G., Ulfa, S., & Armiati. (2018). Pengaruh Persepsi tentang Sarana Prasarana Perkuliahan dan Pelayanan Admintrasi Akademik Terhadap Kepuasan Mahasiswa. *Jurnal EcoGen*, 1, 837–846.
- Harahap, D. A., Hurriyati, R., Gaffar, V., & Amanah, D. (2018). The impact of word of mouth and university reputation on student decision to study at university. *Management Science Letters*, 8(6), 649–658. <https://doi.org/http://dx.doi.org/10.5267/j.msl.2018.4.027>
- Haron, M. Z., Zalli, M. M. M., Othman, M. K., & Awang, M. I. (2020). School's Facilities And Achievement Of Students In Ulul Albab Model Tahfiz Schools In Malaysia: A Mediating Roles Of Satisfaction. *International Journal of Scientific & Technology Research*, 9(2), 3026–3030.
- Ibrahim, Y. (2021). *Pengaruh Biaya Pendidikan Murah dan Kepuasan Akademik Mahasiswa Terhadap Keunggulan Bersaing Pada Universitas Pamulang*. 3(2), 176–184.
- Kardoyo, Pitaloka, L. K., & Hapsoro, B. B. (2020). Analyzing Universities Service Quality to Student Satisfaction; Academic and Non-Academic Analyses. *International Journal of Higher Education*, 9(1), 126–132.
- Kaur, H., & Bhalla, G. S. (2018). Determinants of effectiveness in public higher education-students' viewpoint. *International Journal of Educational Management*, 32(6), 1135–1155. <https://doi.org/10.1108/IJEM-09-2016-0188>
- Khamid, M. N. (2010). *Pengaruh Kualitas Pelayanan an Persepsi Biaya Pendidikan Terhadap Loyalitas Mahasiswa dengan Kepuasan Mahasiswa Sebagai Vardiabel Mediasi pada Program Pascasarjana Universitas Muhammadiyah Surakarta Periode 2009 - 2010*. Universitas Muhammadiyah Surakarta.
- Kinung, & Rudini, A. (2020). Pengaruh Mutu Layanan Akademik dan Biaya Pendidikan terhadap Kepuasan Mahasiswa di STIE Sampit. *E-Jurnal Profit (Jurnal Penerapan Ilmu Manajemen Dan Kewirausahaan)*, 5(2), 81–92.
- Kotler, P., & Keller, K. L. (2007). *Manajemen Pemasaran, Jilid I, Edisi Kedua belas*. PT. Indeks.
- Kurbani, A. (2017). Pengaruh Kualitas Layanan Akademik dan Fasilitas Pendidikan terhadap Kepuasan Mahasiswa Kuliah pada Universitas PGRI Palembang. *Jurnal Media Wahana Ekonomika*, 13(4), 22–35.
- Muklis. (2021). *Pengaruh Motivasi, Biaya Pendidikan Dan Orientasi Karir Terhadap Kepuasan Mahasiswa Pada Program Studi S1 Pendidikan Ekonomi Universitas Negeri Malang*. Universitas Negeri Malang.
- Musanto, T. (2004). Faktor-Faktor Kepuasan Pelanggan dan Loyalitas Pelanggan: Studi Kasus Pada CV. Sarana Media Advertising Surabaya. *Jurnal Manajemen Dan Kewirausahaan*, 6(2), 123–136. <https://doi.org/10.9744/jmk.6.2.pp.123-136>
- Palominos-Belmar, P. I., Quezada-Llanca, L. E., Osorio-Rubio, C. A., Torres-Ortega, J. A., & Lippi-Valenzuela, L. M. (2016). Quality of educational services as per students of a public university in Chile. *Revista Iberoamericana de Educación Superior*, 7(18), 130–142.
- Qirom, Q., & Sungkar, M. (2019). RANCANG BANGUN JARINGAN HOTSPOT, BANDWIDTH DAN BLOKIR WEBSITE BERISI KONTEN NEGATIF UNTUK MENINGKATKAN LAYANAN PEMBELAJARAN DI SD NEGERI BANGUN GALIH 1. *Power Elektronik: Jurnal Orang Elektro*, 6(1), 17–21. <https://doi.org/10.30591/polektro.v6i1.1188>
- Rahmawati, D. (2013). Analisis Faktor-Faktor Yang Mempengaruhi Kepuasan Mahasiswa. *Jurnal Economia*, 9(1), 52–65. <https://doi.org/10.21831/economia.v9i1.1376>
- Schiffman, L. G., & Kanuk, L. L. (2010). *Consumer Behaviour (10th ed)*. Pearson Prentice Hall.

- Shaylide, I. S. (2014). Pengaruh Mutu Layanan Akademik Dan Biaya Pendidikan Terhadap Kepuasan Mahasiswa. *Jurnal Administrasi Pendidikan UPI*, 21(2), 1–11. <https://doi.org/10.17509/jap.v21i2.6671>
- Sukandi, P. (2010). Hubungan Antara Fasilitas Kampus Terhadap Kepuasan Mahasiswa Dalam Menghadapi Daya Saing Jasa Pendidikan (Studi Kasus: Mahasiswa Fakultas Bisnis dan Manajemen Universitas Widyatama). *The 4th PPM National Conference on Management Research*.
- Syakur, Abd. (2018). Hubungan Kualitas Pelayanan Terhadap Kepuasan Mahasiswa Dan Loyalitas Mahasiswa Ditinjau Dari Model Pembelajaran Di Akademi Farmasi Surabaya. *Reformasi*, 8(2), 100. <https://doi.org/10.33366/rfr.v8i2.1091>
- Tjiptono, F. (2012). *Service Management Mewujudkan Layanan Prima*. CV Andi Offset.
- Wijaya, N. S., Said, S., & Landra, N. (2016). *PENGARUH KUALITAS LAYANAN AKADEMIK DAN HARGA (BIAYA PENDIDIKAN) TERHADAP WORD OF MOUTH MELALUI KEPUASAN MAHASISWA SEBAGAI VARIABEL INTERVENING (STUDI PADA LPK SEKOLAH PERHOTELAN BALI)*. 6(2), 101–114.